

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



A 281.9  
R 312  
Cap. 2

UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Service  
Office of Administrator  
Washington, D. C.

REPORT AND RECOMMENDATIONS OF THE 11TH  
MEETING OF THE  
AGRICULTURAL ECONOMICS RESEARCH ADVISORY COMMITTEE

December 4-6, 1963  
Washington, D. C.

Membership of the  
Agricultural Economics Research Advisory Committee

Dr. Sherwood O. Berg, Dean, Institute of Agriculture, University of Minnesota, St. Paul, Minnesota

Mr. Arthur P. Bralley, Vice President, American National Bank of Amarillo, Amarillo, Texas

Dr. George E. Brandow, Professor of Agricultural Economics, Pennsylvania State University, University Park, Pennsylvania

Mr. Raymond E. Frisbie, McDonald, Kansas

Mr. Benjamin Goodwin, Route 1, Box 126, Manteca, California

Mr. W. Gordon Leith, Assistant General Manager, Marketing, Consumers Cooperative Association, P. O. Box 7305, Kansas City, Missouri

Mr. Donald F. Lloyd, General Manager, Associated Food Stores, Inc.  
P. O. Box 2430, Salt Lake City 10, Utah

Dr. Ernest J. Nesius, Vice President, Appalachian Center, West Virginia University, and Director, Cooperative Extension Service, Morgantown, West Virginia

Mr. Thomas H. Roberts, President, DeKalb Agricultural Association, Inc.  
DeKalb, Illinois

Mr. Lauren K. Soth, Editor of the Editorial Pages, Des Moines Register and Tribune, Des Moines, Iowa

## PREFACE

The eleventh meeting of the Agricultural Economics Research Advisory Committee was held in Washington, D. C. on December 4-6, 1963, with all members of the Committee present except Mr. W. Gordon Leith and Mr. Thomas H. Roberts. The Committee made a systematic review of the Department's economic research program. The primary basis for this review was the Progress Reports prepared for the Committee's use by each of the economic research divisions. This source of information was supplemented by oral reports from the following USDA research divisions of the Economic Research Service: Farm Production Economics, Resource Development Economics, Economic and Statistical Analysis, Marketing Economics, Development and Trade Analysis, Foreign Regional Analysis, and from Consumer and Food Economics Division of Agricultural Research Service, the Farmers Cooperative Service, and the Statistical Reporting Service.

Dr. Willard W. Cochrane, Director, Agricultural Economics, USDA, is Chairman of the Committee; and Mr. Nathan M. Koffsky, Administrator, Economic Research Service, USDA, is Vice-Chairman.

After a careful review of all the material available to the Committee the Committee members prepared and submitted the recommendations which follow to the Secretary of Agriculture.

Additional copies of this report may be obtained from James F. Lankford, Executive Secretary of Agricultural Economics Research Advisory Committee, Office of Administrator, Agricultural Research Service, U. S. Department of Agriculture, Washington, D. C.

## REPORT AND RECOMMENDATIONS

### GENERAL COMMENTS

Economic research in the Department of Agriculture should be directed toward the preparation of basic data and basic information about U. S. agriculture as a prime responsibility. National agricultural policy planning, individual farm planning, farm market analysis, decisions of business and financial institutions concerning agriculture and many consumer decisions rest on the economic information furnished by USDA. Therefore, this information function should have priority over other functions of economic research in the Department.

The quality of work in this field has been substantially improved. We commend especially the publication of data by economic classes of farms. Further refinement of classifications on the basis of types of farming would improve this service still more.

Regular surveys of representative farms could supply better information for all phases of the economic intelligence work of ERS. They also could be useful in land use and production economics research.

Special short-run analyses of economic situations calling for policy decisions, such as the proposed sale of wheat to Russia and the rise in beef imports, are extremely valuable. Providing sound information for decision-making within the administration is an essential part of the responsibilities of the Economic Research Service. We believe this Service is the best source of this information. Moreover, much good research traces to active participation in the decision-making process. Nevertheless, a sharp line should be drawn between research as a search for knowledge and research as a "service" in connection with decision making. The Division of Economic and Statistical Analysis of ERS has performed capably in such tasks on an ad hoc basis. Your committee believes this work is so important that it should be explicitly provided for in budget and staff.

The great issues of our time are those concerning world affairs. We feel the USDA economic research has not yet been sufficiently re-oriented to the outside world. The USDA could well invest more resources in collection and analysis of foreign economic data important to U. S. agriculture. This includes studies of demand trends, supply trends, introduction of new technology and changes in farm organization. Research in foreign agriculture, foreign markets for farm products and the rural development efforts of other countries is inadequate. Much more effort should go into studies on agricultural development in support of the foreign aid program in Latin America, Africa, and Asia.

One of the most important duties of the Economic Research Service is to construct projections of agricultural supplies and demand on a regular basis. We recommend that this work be given high priority. The five-year projections in the last Outlook Conference are a useful addition to this service for agriculture.

Study and appraisal of the effects of national farm programs are essential and should be a major project of the ERS. This information is indispensable not only to official decision makers but to the public.

The new field of economic research in rural area development should be enlarged. Ways must be found to provide reliable guidelines for expanding nonfarm employment and income in rural areas.

Rapid and violent changes are taking place in the marketing structure affecting agriculture. Information about these changes is scanty and diverse. We recommend a major effort to improve the Department's collection and analysis of facts on market performance. Farmers need information on concentration and competition in farm marketing and processing. There is great interest in market bargaining power among farmers. There is vast uncertainty about how prices are determined. We believe this kind of fact reporting would be more valuable. The program of the division should be reviewed to provide more resources for this work.

The committee believes more efficiency could be achieved in economic research by combining similar activities into the same unit.

#### ECONOMIC AND STATISTICAL ANALYSIS

The Committee regards the systematic compilation of data on prices, production, expenses, income, labor force, product utilization, and similar aspects of the economic position of agriculture as one of the most important functions of the Department. The very wide use of such data and the continually changing nature of the farm economy require persistent effort to improve the quality of the information and to modify and extend it to keep it current and meaningful. The report of the March 1963 meeting of the Committee calls attention to several broad areas of work regarded as especially important.

Special studies of market situations that suddenly assume particular importance -- for example, the rise in imports of beef or the sale of wheat to Russia -- are valuable to farmers, the agricultural industries, Congress and others. The Division should have sufficient personnel and flexibility to make timely studies of such questions without disrupting its more permanent work.

The need for integrated information about agriculture and for more frequent indications about changing situations than provided by the census creates a need for comprehensive, periodic surveys, perhaps organized around representative farm studies. This approach seems capable of obtaining more consistent and suitable basic data than now available. Close cooperation with the Farm Production Economics and Resource Development Economic Divisions will, of course, be necessary.

The expanded work in the Department on foreign markets is leading to new information of considerable value to farmers and the agricultural industries. Information of this kind should be summarized in the Situation reports and other well-known releases dealing with domestic markets so that it will be promptly called to the attention of all users of the Department's economic data.

Studies of rural migration, education, and the like continue to be important as agriculture adjusts to the impact of farm technology. Farm labor is a question that will require much more attention in the future. Changes in wages and working conditions, whether through legislation or market forces, seem in prospect. Many related problems are appearing, some of them involving the business organization of farms, others involving the methods of handling and processing of farm products by marketing firms, and some involving questions of labor migration, living conditions, and the like. Several of these questions are matters on which this Division of the Department might assemble data and make economic analyses.

#### FARM PRODUCTION ECONOMICS AND RESOURCE DEVELOPMENT ECONOMICS

We find in these two divisions of Economic Research Service a group of research workers dedicated, strongly motivated and generally well informed on current problem areas. For this we commend the two divisions.

Highly appropriate to the situation today would be for these particular divisions to raise questions as to actual need and priority for some of the on going and projected research activities; and through an introspective analysis determine emerging needs, priorities, phase-outs, and close-outs.

We believe more of the research activity should be geared to the more obvious emerging problem situations. We raise the question about some of the continuing routine series for information formulation. Granting that much of the "series" information is important, we

recommend serious evaluation to determine what is important, and that which can be given to technicians rather than researchers. In this manner shifts in research manpower to important research needs would eliminate partially the necessity for additional researchers.

We believe more research emphasis should be given to supply information to problems not yet existent, but which trends and other comparable analytical methods suggest with a high degree of probability to be on the horizon.

Research to show the developmental value of various agriculture enterprises to a community or region seems desirable. Such research should yield information showing the various enterprises in comparison with non-agricultural enterprises. Relevant aspects of the problem include effect on the life and stability of the community, complementary relationships with industrial development activities, and overall economic growth.

Research to identify and explain the phases (or stages) of agriculture development would be of tremendous value to the image of agriculture in transition, to the policy and budget makers, to the agencies in agriculture, and to the various segments of the industry. Of particular importance in the several years will be the projected stages beyond the present to guide many forthcoming events. Such a project should command a high priority.

#### MARKETING ECONOMICS AND SPECIAL SURVEYS BRANCH OF SRS

Some of the most important changes going on in the food and agriculture sector of the economy, from the standpoint both of farmers' welfare and use of the country's economic resources, are in the area of marketing. The program of ERS in the general area of marketing costs, margins, and efficiency has been extremely important in the past, and we see no diminution of need for this kind of work in the future. We also urge the Division to continue its evaluation of the food distribution programs. The work on testing the marketability of new products developed in the regional laboratories is a necessary part of the effort to develop new markets for farm products.

Promotion of farm products is an area of growing importance and of expenditure of producers' funds. We believe that the principal effort of ERS in this respect should be to analyze the effectiveness of promotion programs and to make other studies designed to discover the principles that determine when and where promotion is successful. Any light that can be shed on this question will be very useful to producer and industry groups in making marketing decisions.

Research on marketing problems requires the joint efforts of government, the industries involved, and farm groups. This is essential to effective research and to acceptance and use of findings. Constant attention should be given to the general question of the lines along which marketing research should be developed in order to make best use of the resources of ERS in such a joint effort.

In this connection, we believe that an increasing proportion of studies made by ERS and SRS on such questions as consumers' preferences, domestic market development, promotion of particular products should be conducted cooperatively with industrial and producer groups, and often with funds provided in part by them. This kind of cooperation can make the best use of the skills of ERS research workers, while gaining cooperation in research and in application of results by industry.

We believe that the emphasis by ERS on marketing costs and market organization is in the right direction. Changes in market structure, together with farmers' interest in bargaining power, will increase demands for this kind of economic information. We believe that in the long run, one of the most useful things ERS might do would be to assemble coordinated, continuing, economic series concerning changes in the physical flow of product through the market, including changes in form of utilization; changes in concentration of firms at different levels of marketing; integration of functions at successive stages; size of plants; price stability and the extent to which price changes at one level of marketing are transmitted to another; changes in price spreads and major cost components; comparative profit rates; and the like. Such information would be prepared with a view toward giving preceptive answers in the future to questions about how the competitive, price, and cost situation is changing in the marketing of particular farm commodities. Such information will be very useful to decision-making by firms engaged in marketing and to producer groups, as well as to evaluation of market performance and to policy decisions.

An area in which better information is badly needed is truck transportation of farm and food products, both as to movement and transportation costs. We believe that it would be useful to assemble data on truck transportation rates even if it is not feasible to obtain information on all types of haul and all types of firms.

#### FARMER COOPERATIVE SERVICE

The research and educational work of the Farmer Cooperative Service is a valuable service to farmers in their efforts to obtain the benefits of cooperative purchasing and marketing. We consider it appropriate that this work should include attention to management, personnel, and similar problems common to all business enterprises as well as to financial, membership, and other questions arising from the unique nature of the organizations.

We think it is important to continue to direct attention to members' and directors' understanding of the business and special problems of cooperatives. As cooperatives grow larger and their management becomes more specialized and highly skilled, the need for members' understanding of principles of cooperative operation becomes greater if a close and effective tie is to exist between the membership on the one hand and the policies of the cooperative as a business firm on the other.

We reviewed the specific studies under way and think them generally consistent with the purposes of the agency. Other than pointing out the need for close cooperation between Farmer Cooperative Service and the Marketing Economics Division of ERS, we have no comments to make about individual projects.

#### STATISTICAL REPORTING SERVICE

The Committee wishes to express its strong support of the function of crop and livestock estimating and of price reporting. The need for revising estimation methods to keep step with a changing agriculture, to meet demands for prompter and more exact information, and to take advantage of progress in data processing and similar techniques is inadequately recognized.

SRS is faced with a formidable task of improving the quality of crop and livestock estimates through objective as opposed to subjective measurements and by use of area sampling methods as part of its estimation procedures. Support of this work will pay off in more accurate data in future years. When producers and industrial groups have special need for highly specific estimates, support of the cost of the work by the groups affected is often appropriate and will avoid diversion of resources from the task of improving general estimation methods.

#### CONSUMER AND FOOD ECONOMICS RESEARCH DIVISION

One of the most valuable aspects of the economic work of this Division has been the nationwide surveys of food consumption and dietary levels. In view of the wide use of these studies for further economic and nutritional analysis, we believe that more frequent and comprehensive studies should have one of the top priorities in the Division. The work can be especially useful if data are obtained in sufficient detail and volume to permit disentangling the separate effects of income, region, season of year, ethnic group, and other characteristics on consumption and expenditure.

We also recommend studies by the Division in cooperation with ERS and SRS that serve to evaluate food distribution programs with respect to effects on amount and type of food consumed, the respects in which consumer welfare could be increased by better use of the assistance provided by the programs, and the effects of cultural and economic circumstances influencing program results.

The strong interest in the question of how the welfare of farm people compares with the welfare of urban people requires information not only on comparative incomes, but also on comparative expenditures required to achieve the same consumption levels. This Division seems well qualified to define patterns of food consumption and expenditures of rural families for clothing, housing, etc., that would be comparable to data used for urban families included in the ELS Consumers Price Index. Expenditures required on the part of farm and urban families could then be compared. It seems possible to improve substantially our knowledge of rural vs. urban welfare by fortifying information about expenditures required to achieve given levels of consumption in different situations.

#### FOREIGN DEVELOPMENT AND TRADE ANALYSIS AND FOREIGN REGIONAL ANALYSIS

The Committee views the Economic Research Service as having two basic objectives in this area of activity: first, the compiling and interpretation of basic agricultural data from world-wide sources; and, second, the analyzing of the impact of world agricultural trade, economic assistance, and technical assistance policies and programs upon the American and other nation's economics in general and their agriculture in particular. The Committee believes that if the United States is to meet its many international commitments in the years ahead, research on the economics of world agriculture and of agricultural development must be conscientiously built into the work responsibilities of the Department of Agriculture, and the findings be made available to decision-makers in government, farming, and agricultural industry. Much is being done; promising efforts point the way to

further accomplishments. The Committee wishes to commend ERS on its productivity in recent months; particularly the initiation of world agricultural price series, the issuance of reports on Eastern European agricultural developments, the analysis of the European Common Market trading problems, the publication of the 102 country agricultural policy report, the supervision of an expanded series of overseas studies, and the inauguration of new technical assistance analyses abroad.

The Committee, while recognizing staff strength and competence in this area, is concerned that they are becoming scattered and thinly spread in their use. Therefore, the Committee recommends that resources, through internal redeployment and additions, be directed to foreign agricultural research. Moreover, the pool of competent people with the necessary professional and personal skills must be enlarged in order to match men and jobs more adequately and quickly.

The Committee also urges that ERS "pull together" the many individual studies conducted for small, selected agricultural areas of the world, systematize them, and begin to construct the broad generalizations which will be helpful to governments, businessmen and farmers.

The Committee questions if the present organizational structure provides the optimum in administrative coordination and intellectual interaction. The trade analysis activity, for example, is more nearly parallel that of the functions under regional analysis than developmental work. These observations suggest further study for more effective and productive working relationships.

IN THE COMMITTEE'S REVIEW OF THE PROPOSED PROBLEMS REQUIRING NEW OR ADDITIONAL RESEARCH, THE FOLLOWING AREAS WERE CONSIDERED:

Strengthening of World Trade Statistics. Trade statistics on a world wide scale are needed as factual bases in formulating government policies, positions, and programs designed to expand foreign commercial markets for U. S. farm products, to increase Food for Peace shipments, and to minimize the impacts of foreign competition on U. S. agriculture in the domestic and foreign markets. Much has been done in recent years to increase the quality, timeliness, and coverage of U. S. export and import statistics; however, further emphasis is needed on developing useful world trade series of both export and imports and analysis of these statistics to determine the major shifts in relation to the U. S. position.

World Agricultural Price Series. Price series for individual commodities, overall indices for world agricultural prices and price indice of U. S. farm exports and imports to supplement existing quantity indices are needed as working tools for foreign trade analysis. The Committee strongly recommends this research and urges its refinement and strengthening.

Foreign Production and Utilization Statistics. Current, accurate data contribute to useful short-term analyses of export prospects. To take advantage of fast changing conditions, U. S. traders must be in a knowledgeable position. The sudden appearance of the Soviet Union in the world food grain markets as a buyer in the early autumn of 1963 is case in point. The Committee recommends the strengthening of efforts to obtain better data regarding stocks of grain and oil-seeds, utilization of grains, and the production and marketing of animal products in major foreign countries.

World Food Budget. Emphasis should be given to refining the world food budget with particular attention to measures that will permit quantitative evaluation of nutritional deficiencies in underdeveloped countries. Investigations should be made of the impediments to eliminating food deficits such as (1) the impact of expanded imports on the domestic economy; (2) long-standing habits of diet and social and religious taboos; and (3) difficulties of distributing food through existing ports, inadequate inland transportation and storage facilities.

Monetary and Financial Analysis of Trade and Development Programs. The research emphasis on international monetary and financial developments as they pertain to United States agricultural trade and the Nation's balance of payments should be subject to a continuing analysis. Particular attention should be given to the effects of U. S. agricultural exports shipped under alternative U. S. Government agricultural export programs upon the recipient countries' and United States' balance of payments, government budgets and monetary systems.

Emphasis on Regional Analyses. The European Common Market is of great significance to U. S. agriculture directly. It also will have a considerable impact on the less developed countries which we are trying to help along the path of economic progress. Studies are needed of the effect of EEC policies on Africa, Latin America and Asia.

Greater effort should be made to procure and analyze fundamental statistics on production, prices, and other economic changes in the less-developed countries. We also need more facts about agricultural and trade developments in the Communist Bloc.

Measures for the Protection of Agriculture in Foreign Trade. Research should be undertaken on the international trade implications of tariff as well as nontariff measures for the protection of agriculture. This research should involve a continuing analysis of the changes in various measures of protection for major commodities in important agricultural exporting and importing countries, particularly in the European Economic Community.

Evaluation of International Agricultural Commodity Agreements. Research is needed to analyze the kinds of international agricultural commodity agreements and trading arrangements which promote economic stability and growth. The study of commodity agreements and the economic forces which lie behind these devices for assisting primary producing areas in particular require a thorough review of their strengths and weaknesses.

The Role of Food Aid in Economic Development. With agricultural commodity assistance now accounting for approximately one-half of the total net U. S. foreign economic aid supplied from public sources, it appears that a continuing review and appraisal of the contribution of such assistance to international aid and development is needed.

Effects of Economic Development on Low Income Countries on Demand for U. S. Farm Exports. Research is needed on the potentials for increasing U. S. commercial farm exports to developing countries. The problem hinges on the manner in which U. S. farm export opportunities can be expanded through economic aid, technical assistance and present and modified trade policies.

Projections of Changes in Agricultural Productivity. Research is needed on production shifts from less productive regions to more productive ones, and measures of agricultural productivity by geographic regions.

Economics of Conservation Practices. Provisions of the Food and Agriculture Act of 1962 relating to cropland conversion and to resource conservation and development underscore the need for expanded research on the economics of conservation practices to provide a better basis for national program guidance.

Economic Analysis of Alternative Methods of Pest Control. Farmers may face the prospect of substantial restrictions on the use of presently permitted pesticides with serious economic consequences for producers, consumers, and businesses and industries serving agriculture. Research should be initiated promptly to appraise the economic implications for agriculture of more restricted use of pesticides considered injurious to human health.

Emerging Farm Capital and Credit Problems. Financial problems of farmers and financial institutions serving farmers are being sharply accentuated by the rapid shift to fewer and larger farms, greater dependence on purchased inputs, rising land prices, and the outlook for a continuing unfavorable relation between land prices and debt-paying capacity from farm earnings.

Problems of Financing and Administering Local Rural Government. In areas of economic and population decline, as well as in those where recreation or industrial development holds promise, research is needed to analyze the nature and extent of the fiscal plight of local government and to explore alternative methods for supplying and paying for needed public services and facilities. Attention should be given to the experience of rural communities that have experimented with new forms of local government organization or new financing devices, to evaluate their effectiveness and their impact on farmers and other rural people.

Economics of Farm Enlargement. More intensive research should be undertaken to determine the special valuation and financing problems involved in such purchases, and to determine the relative returns to capital invested in additional land in comparison with alternative investments in non-real estate inputs. Such a study also should examine the characteristics of the farms that disappear as a result of being consolidated with other farms.

Projections of Rates of Feed Use by Livestock. Additional research is needed to measure more adequately current trends in livestock feeding rates, and to analyze the important causal variables.

Future Impacts of Farm Mechanization. Mechanization continues to have profound effects on agricultural productivity and resource use. Research is needed to analyze recent and prospective changes in mechanization and their probable impacts on agriculture.

Farmers' Production Response. Recommended research on farmers' production response should be supplemented by more intensive analysis of data available for 40 representative commercial family-operated farms.

Causes and Impacts of Shifts in Land Use. Information is needed on types of shifts that are occurring, causes of each type of shift, economic and social impacts of the various land use changes, and means of guiding these changes in such a manner as to insure that future land use patterns will be in accord with the overall goal of stable economic growth.

Improvement of Land Use Statistics. Private and public activities and programs concerned with the development and conservation of land and water resources, promotion of orderly urban development on the rural-urban fringe, construction of highway systems, design and implementation of agricultural programs of supply management, and the use of land and water resources for recreational purposes have urgent need for adequate land use statistics.

Improving Efficiency of Water Use. Economic research on the benefits of watershed management, reduced conveyance, improved irrigation practices, phreatophyte control, ground water management, and other techniques for increasing the efficiency of agricultural water use needs to be undertaken and closely coordinated with hydrologic and engineering research, particularly with that of the Agricultural Research Service at its regional and national research centers.

Evaluation of Rural and Rural-Urban Zoning Innovations. Analyses are needed to determine the effectiveness of the new techniques, including evaluations of the resource management objectives sought by the governmental units, zoning procedures and regulations used, extent to which resource management objectives have been achieved, and possible improvements in zoning devices.

Appraisal of Organizations for Resource Management. Analysis should be made of the resource management objectives, composition, operation, and success of the numerous organizations, including the cooperation of the Federal government in management functions. Consideration would be given to large resource districts encompassing a number of local units of government, regional governmental devices, interstate districts, interstate compacts, and Federal-State compacts.

Easements for Public Purposes. Research should be undertaken to determine when and how different types of easements can be used and likely costs under various conditions, making full use of past experiences of governments in acquiring scenic easements, development easements, flowage easements, drainage easements, and others such as fishing and hunting easements.

Consolidation of Small Units and Idle Lands. Research is needed on the relative costs and practicability of consolidation through such means as community corporations, cooperative forestry enterprises, land exchanges, and land trusts. This research would include not only the economics and financing of such organizations, but the effects on community structure and public acceptance of widespread ownership incorporation.

Landownership Patterns in the United States. A comprehensive survey of landownership should be undertaken to replace outdated information, to close gaps left by selected regional studies, and to obtain more information on absenteeism, concentration of holdings and dispersion of rights, ownership and income, and idle land and urban expansion.

Maintaining Agriculture as a Land Use on the Rural-Urban Fringe.

Research is needed to: (1) determine the present status of land uses such as agriculture, open, idle, and wooded, within the peripheries or fringe areas of major metropolitan complexes; (2) analyze the role of functioning farms in maintaining open space in urbanizing areas; (3) analyze the characteristics of operational farms remaining in the fringes of metropolitan growth, including prospects that improved management practices to preserve the land in agriculture might be adopted; (4) explore potentials for using financial and other aids to keep farming units in operation; (5) analyze innovations in patterns of nonfarm land use; and (6) study possible alternative arrangements whereby tangible and intangible public benefits from land use in agriculture might become tangible credits for preserving the land in agricultural uses.

Opportunities for the Development of Outdoor Recreation Enterprises by Farmers and Other Rural Landowners. Farm recreation enterprises are a promising means of meeting much of the rapidly expanding demand for outdoor recreation. Economic studies are needed to evaluate the kinds and amounts of outdoor recreation requirements that can be provided by farmers and other rural landowners in the various geographic areas and the expected farm and area income and employment impacts of establishing recreational enterprises on farms.

Characteristics of Resources in Relation to their Fostering Economic Growth. Little is known of the characteristics of local resources and other forces that stimulate local economic growth. There is a need to refine national and regional economic data and establish resource-growth relationships for local low income areas; and to expand research designed to locate, quantify, and isolate the basic causes of economic underemployment among rural people.

Ability of Rural People to Support Adequate Housing. Research is needed which will provide information that can be used to determine: (1) The populations that can be effectively aided in the attainment of minimum adequate housing by present policies and program authorizations; (2) the nature, number, and location of families with income levels inadequate for support of minimum adequate housing; and (3) the extent of income improvement that would be required to enable low income families to support specified levels of housing.

Economic Development in the Appalachian Region. Additional research is needed to predict the kinds and locations of economic activity that are economically feasible, and to provide basic information for public development programs.

Resources and Recreation Development in the Northern Great Lakes Region. Research is needed to determine how and by what means resources, both physical and human, can be utilized more effectively to improve incomes and employment.

Adjustments. Concerning the work in "Adjustments Most Profitable for Farmers" we think it is particularly important that information about inputs and outputs on farms be brought together so that it can be interpreted regionally and nationally.

Individual farm management studies of localized or specialized interest should be given low priority as compared with studies of regional or national significance.

Rural Development. Concerning area economic development, it is suggested that attention be given to: (1) Construction of balance sheets on an economic area showing the capital base and capital use, income flow and distribution, expense flow, and the effects of income flows by various new enterprises. (2) The study of effects on rural economic development of new and improved highways.

Efficiency in Agriculture. Basic work should be done to examine the incidence of our large investments in development and dissemination of new farm technology. There is great lack of understanding of the costs and benefits of public investments in new technology, the causal relationships to surplus production as well as downward pressures on farm prices and incomes. A hard look needs to be taken at the philosophy of "least cost at farm gate."